WHAT IS CLAIMED IS:

1. A substrate manufacturing method comprising:

a step of forming a first substrate which has a partial insulating layer on a semiconductor region and a semiconductor layer on a region surrounded by the partial insulating layer and on the partial insulating layer;

a step of implanting ions into the first substrate through a surface of the first substrate to form a separation layer at a position deeper than a position of the partial insulating layer;

a step of bonding a second substrate to the surface of the first substrate, in which the separation layer is formed, to form a bonded substrate stack; and

a step of splitting the bonded substrate stack at the separation layer.

2. The method according to claim 1, further comprising a step of planarizing the surface of the first substrate before bonding the second substrate to the first substrate.

3. The method according to claim 1, wherein in the step of forming the first substrate, a single-crystal semiconductor layer is formed on the region surrounded by the partial insulating layer, and a non-single-crystal semiconductor layer is formed on the partial insulating layer.

4. The method according to claim 1, wherein the

semiconductor region comprises a semiconductor layer formed on the substrate by epitaxial growth.

5. The method according to claim 1, wherein at least a surface, to be bonded to the first substrate, of the second substrate comprises an insulator.

6. The method according to claim 1, further comprising a step of forming a bonding layer to be bonded to the second substrate across the surface of the first substrate.

7. The method according to claim 6, further comprising a step of planarizing a surface of the bonding layer after the step of forming the bonding layer and before the step of forming the bonded substrate stack.

8. The method according to claim 6, further comprising a step of planarizing the surface of the first substrate after the step of forming the first substrate and before the step of forming the bonding layer.

9. The method according to claim 6, wherein in the step of forming the bonding layer, a layer having a substantially uniform structure across a surface of the layer is formed as the bonding layer.

10. The method according to claim 6, wherein in the step of forming the bonding layer, a polycrystalline semiconductor layer is formed as the bonding layer.

11. The method according to claim 6, wherein in the

step of forming the bonding layer, an amorphous semiconductor layer is formed as the bonding layer.

12. The method according to claim 6, wherein in the step of forming the bonding layer, an insulating layer is formed as the bonding layer.

13. The method according to claim 12, wherein the insulating layer comprises an oxide film.

14. The method according to claim 13, wherein in the step of forming the bonding layer, the oxide film is formed by CVD.

15. The method according to claim 1, wherein

the step of forming the first substrate includes

a first growth step of growing a single-crystal semiconductor layer on the region surrounded by the partial insulating layer under the condition that no layer grow on the partial insulating layer, and

a second growth step of further growing a single-crystal semiconductor layer on the single-crystal semiconductor layer and growing a non-single-crystal semiconductor layer on the partial insulating layer.

16. The method according to claim 15, wherein in the first growth step, the single-crystal semiconductor layer is grown to have a thickness larger than a thickness of the partial insulating layer.

17. The method according to claim 15, wherein in the first growth step, the single-crystal semiconductor

layer is grown such that the non-single-crystal semiconductor layer to be formed in the subsequent second growth step fits in a region on the partial insulating layer.

18. The method according to claim 1, wherein the ions include hydrogen ions or helium ions.

19. A substrate which can be manufactured by a manufacturing method as defined in claim 1.